RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 09/783,931 B _____

Source: _____ TFW16 _____

Date Processed by STIC: _____ 10/27/2005 _____

ENTERED

RAW SEQUENCE LISTING   DATE: 10/27/2005
PATENT APPLICATION: **US/09/783,931B**   TIME: 11:56:30

Input Set : **D:\2nd Substi SEQLIST 7326-122 (as filed).TXT**
Output Set: **N:\CRF4\10272005\I783931B.raw**

```
 4 <110> APPLICANT: Ish-Horowicz, David
 5        Henrique , Domingos Manuel Pinto
 6        Lewis, Julian Hart
 7        Artavanis Tsakonas, Spyridon
 8        Gray, Grace
10 <120> TITLE OF INVENTION: ANTIBODIES TO VERTEBRATE DELTA PROTEINS
11        AND FRAGMENTS
13 <130> FILE REFERENCE: 7326-122-999
15 <140> CURRENT APPLICATION NUMBER: 09/783,931B
16 <141> CURRENT FILING DATE: 2001-02-15
18 <150> PRIOR APPLICATION NUMBER: 08/981,392
19 <151> PRIOR FILING DATE: 1997-12-22
21 <150> PRIOR APPLICATION NUMBER: PCT/US96/11178
22 <151> PRIOR FILING DATE: 1996-06-28
24 <150> PRIOR APPLICATION NUMBER: 60/000,589
25 <151> PRIOR FILING DATE: 1995-06-28
27 <160> NUMBER OF SEQ ID NOS: 95
29 <170> SOFTWARE: FastSEQ for Windows Version 4.0
31 <210> SEQ ID NO: 1
32 <211> LENGTH: 2508
33 <212> TYPE: DNA
34 <213> ORGANISM: Gallus gallus
36 <220> FEATURE:
37 <221> NAME/KEY: CDS
38 <222> LOCATION: (277)...(2460)
39 <223> OTHER INFORMATION: Chick Delta (C-Delta-1) gene
41 <400> SEQUENCE: 1
42 gaattcggca cgaggttttt tttttttttt ttcccctctt ttctttcttt tccttttgcc 60
43 atccgaaaga gctgtcagcc gccgccgggc tgcacctaaa ggcgtcggta gggggataac 120
44 agtcagagac cctcctgaaa gcaggagacg ggacggtacc cctccggctc tgcggggcgg 180
45 ctgcggcccc tccgttcttt cccctcccc gagagacact cttcctttcc ccccacgaag 240
46 acacaggggc aggaacgcga gcgctgcccc tccgcc atg gga ggc cgc ttc ctg   294
47                                         Met Gly Gly Arg Phe Leu
48                                          1                 5
50 ctg acg ctc gcc ctc ctc tcg gcg ctg ctg tgc cgc tgc cag gtt gac   342
51 Leu Thr Leu Ala Leu Leu Ser Ala Leu Leu Cys Arg Cys Gln Val Asp
52             10                  15                  20
54 ggc tcc ggg gtg ttc gag ctg aag ctg cag gag ttt gtc aac aag aag   390
55 Gly Ser Gly Val Phe Glu Leu Lys Leu Gln Glu Phe Val Asn Lys Lys
56         25                  30                  35
58 ggg ctg ctc agc aac cgc aac tgc tgc cgg ggg ggc ggc ccc gga ggc   438
59 Gly Leu Leu Ser Asn Arg Asn Cys Cys Arg Gly Gly Gly Pro Gly Gly
60     40                  45                  50
```

```
62 gcc ggg cag cag cag tgc gac tgc aag acc ttc ttc cgc gtc tgc ctg   486
63 Ala Gly Gln Gln Gln Cys Asp Cys Lys Thr Phe Phe Arg Val Cys Leu
64  55              60              65              70
66 aag cac tac cag gcc agc gtc tcc ccc gag ccg ccc tgc acc tac ggc   534
67 Lys His Tyr Gln Ala Ser Val Ser Pro Glu Pro Pro Cys Thr Tyr Gly
68                  75              80              85
70 agc gcc atc acc ccc gtc ctc ggc gcc aac tcc ttc agc gtc ccc gac   582
71 Ser Ala Ile Thr Pro Val Leu Gly Ala Asn Ser Phe Ser Val Pro Asp
72                  90              95              100
74 ggc gcg ggc ggc gcc gac ccc gcc ttc agc aac ccc atc cgc ttc ccc   630
75 Gly Ala Gly Gly Ala Asp Pro Ala Phe Ser Asn Pro Ile Arg Phe Pro
76          105             110             115
78 ttc ggc ttc acc tgg ccc ggc acc ttc tcg ctc atc atc gag gct ctg   678
79 Phe Gly Phe Thr Trp Pro Gly Thr Phe Ser Leu Ile Ile Glu Ala Leu
80      120             125             130
82 cac acc gac tcc ccc gac gac ctc acc aca gaa aac ccc gag cgc ctc   726
83 His Thr Asp Ser Pro Asp Asp Leu Thr Thr Glu Asn Pro Glu Arg Leu
84 135             140             145             150
86 atc agc cgc ctg gcc acc cag agg cac ctg gcg gtg ggc gag gag tgg   774
87 Ile Ser Arg Leu Ala Thr Gln Arg His Leu Ala Val Gly Glu Glu Trp
88              155             160             165
90 tcc cag gac ctg cac agc agc ggc cgc acc gac ctc aag tac tcc tat   822
91 Ser Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Lys Tyr Ser Tyr
92              170             175             180
94 cgc ttt gtg tgt gat gag cac tac tac ggg gaa ggc tgc tct gtc ttc   870
95 Arg Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val Phe
96          185             190             195
98 tgc cgg ccc cgt gac gac cgc ttc ggt cac ttc acc tgt gga gag cgt   918
99 Cys Arg Pro Arg Asp Asp Arg Phe Gly His Phe Thr Cys Gly Glu Arg
100     200             205             210
102 ggc gag aag gtc tgc aac cca ggc tgg aag ggc cag tac tgc act gag   966
103 Gly Glu Lys Val Cys Asn Pro Gly Trp Lys Gly Gln Tyr Cys Thr Glu
104 215             220             225             230
106 ccg att tgc ttg cct ggg tgt gac gag cag cac ggc ttc tgc gac aaa   1014
107 Pro Ile Cys Leu Pro Gly Cys Asp Glu Gln His Gly Phe Cys Asp Lys
108                 235             240             245
110 cct ggg gaa tgc aag tgc aga gtg ggt tgg cag ggg cgg tac tgt gac   1062
111 Pro Gly Glu Cys Lys Cys Arg Val Gly Trp Gln Gly Arg Tyr Cys Asp
112             250             255             260
114 gag tgc atc cga tac cca ggc tgc ctg cac ggt acc tgt cag cag cca   1110
115 Glu Cys Ile Arg Tyr Pro Gly Cys Leu His Gly Thr Cys Gln Gln Pro
116         265             270             275
118 tgg cag tgc aac tgc cag gaa ggc tgg ggc ggc ctt ttc tgc aac cag   1158
119 Trp Gln Cys Asn Cys Gln Glu Gly Trp Gly Gly Leu Phe Cys Asn Gln
120     280             285             290
122 gac ctg aac tac tgc act cac cac aag cca tgc aag aat ggt gcc aca   1206
123 Asp Leu Asn Tyr Cys Thr His His Lys Pro Cys Lys Asn Gly Ala Thr
124 295             300             305             310
126 tgc acc aac acc ggt cag ggg agc tac act tgt tct tgc cga cct ggg   1254
```

RAW SEQUENCE LISTING   DATE: 10/27/2005
PATENT APPLICATION: US/09/783,931B   TIME: 11:56:30

Input Set : D:\2nd Substi SEQLIST 7326-122 (as filed).TXT
Output Set: N:\CRF4\10272005\I783931B.raw

```
127 Cys Thr Asn Thr Gly Gln Gly Ser Tyr Thr Cys Ser Cys Arg Pro Gly
128             315             320             325
130 tac aca ggc tcc agc tgc gag att gaa atc aac gaa tgt gat gcc aac  1302
131 Tyr Thr Gly Ser Ser Cys Glu Ile Glu Ile Asn Glu Cys Asp Ala Asn
132             330             335             340
134 cct tgc aag aat ggt gga agc tgc acg gat ctc gag aac agc tat tcc  1350
135 Pro Cys Lys Asn Gly Gly Ser Cys Thr Asp Leu Glu Asn Ser Tyr Ser
136         345             350             355
138 tgt acc tgc ccc cca ggc ttc tat ggt aaa aac tgt gag ctg agt gca  1398
139 Cys Thr Cys Pro Pro Gly Phe Tyr Gly Lys Asn Cys Glu Leu Ser Ala
140     360             365             370
142 atg act tgt gct gat gga ccg tgc ttc aat gga ggg cga tgc act gac  1446
143 Met Thr Cys Ala Asp Gly Pro Cys Phe Asn Gly Gly Arg Cys Thr Asp
144 375             380             385             390
146 aac cct gat ggt gga tac agc tgc cgc tgc cca ctg ggt tat tct ggg  1494
147 Asn Pro Asp Gly Gly Tyr Ser Cys Arg Cys Pro Leu Gly Tyr Ser Gly
148             395             400             405
150 ttc aac tgt gaa aag aaa atc gat tac tgc agt tcc agc cct tgt gct  1542
151 Phe Asn Cys Glu Lys Lys Ile Asp Tyr Cys Ser Ser Ser Pro Cys Ala
152         410             415             420
154 aat gga gcc cag tgc gtt gac ctg ggg aac tcc tac ata tgc cag tgc  1590
155 Asn Gly Ala Gln Cys Val Asp Leu Gly Asn Ser Tyr Ile Cys Gln Cys
156         425             430             435
158 cag gct ggc ttc act ggc agg cac tgt gac gac aac gtg gac gat tgc  1638
159 Gln Ala Gly Phe Thr Gly Arg His Cys Asp Asp Asn Val Asp Asp Cys
160     440             445             450
162 gcc tcc ttc ccc tgc gtc aat gga ggg acc tgt cag gat ggg gtc aac  1686
163 Ala Ser Phe Pro Cys Val Asn Gly Gly Thr Cys Gln Asp Gly Val Asn
164 455             460             465             470
166 gac tac tcc tgc acc tgc ccc ccg gga tac aac ggg aag aac tgc agc  1734
167 Asp Tyr Ser Cys Thr Cys Pro Pro Gly Tyr Asn Gly Lys Asn Cys Ser
168             475             480             485
170 acg ccg gtg agc aga tgc gag cac aac ccc tgc cac aat ggg gcc acc  1782
171 Thr Pro Val Ser Arg Cys Glu His Asn Pro Cys His Asn Gly Ala Thr
172             490             495             500
174 tgc cac gag aga agc aac cgc tac gtg tgc gag tgc gct cgg ggc tac  1830
175 Cys His Glu Arg Ser Asn Arg Tyr Val Cys Glu Cys Ala Arg Gly Tyr
176         505             510             515
178 ggc ggc ctc aac tgc cag ttc ctg ctc ccc gag cca cct cag ggg ccg  1878
179 Gly Gly Leu Asn Cys Gln Phe Leu Leu Pro Glu Pro Pro Gln Gly Pro
180     520             525             530
182 gtc atc gtt gac ttc acc gag aag tac aca gag ggc cag aac agc cag  1926
183 Val Ile Val Asp Phe Thr Glu Lys Tyr Thr Glu Gly Gln Asn Ser Gln
184 535             540             545             550
186 ttt ccc tgg atc gca gtg tgc gcc ggg att att ctg gtc ctc atg ctg  1974
187 Phe Pro Trp Ile Ala Val Cys Ala Gly Ile Ile Leu Val Leu Met Leu
188             555             560             565
190 ctg ctg ggt tgc gcc gcc atc gtc gtc tgc gtc agg ctg aag gtg cag  2022
191 Leu Leu Gly Cys Ala Ala Ile Val Val Cys Val Arg Leu Lys Val Gln
```

RAW SEQUENCE LISTING   DATE: 10/27/2005
PATENT APPLICATION: US/09/783,931B   TIME: 11:56:30

Input Set : D:\2nd Substi SEQLIST 7326-122 (as filed).TXT
Output Set: N:\CRF4\10272005\I783931B.raw

```
192            570               575               580
194 aag agg cac cac cag ccc gag gcc tgc agg agt gaa acg gag acc atg   2070
195 Lys Arg His His Gln Pro Glu Ala Cys Arg Ser Glu Thr Glu Thr Met
196        585               590               595
198 aac aac ctg gcg aac tgc cag cgc gag aag gac atc tcc atc agc gtc   2118
199 Asn Asn Leu Ala Asn Cys Gln Arg Glu Lys Asp Ile Ser Ile Ser Val
200     600               605               610
202 atc ggt gcc act cag att aaa aac aca aat aag aaa gta gac ttt cac   2166
203 Ile Gly Ala Thr Gln Ile Lys Asn Thr Asn Lys Lys Val Asp Phe His
204 615               620               625               630
206 agc gat aac tcc gat aaa aac ggc tac aaa gtt aga tac cca tca gtg   2214
207 Ser Asp Asn Ser Asp Lys Asn Gly Tyr Lys Val Arg Tyr Pro Ser Val
208            635               640               645
210 gat tac aat ttg gtg cat gaa ctc aag aat gag gac tct gtg aaa gag   2262
211 Asp Tyr Asn Leu Val His Glu Leu Lys Asn Glu Asp Ser Val Lys Glu
212        650               655               660
214 gag cat ggc aaa tgc gaa gcc aag tgt gaa acg tat gat tca gag gca   2310
215 Glu His Gly Lys Cys Glu Ala Lys Cys Glu Thr Tyr Asp Ser Glu Ala
216        665               670               675
218 gaa gag aaa agc gca gta cag cta aaa agt agt gac act tct gaa aga   2358
219 Glu Glu Lys Ser Ala Val Gln Leu Lys Ser Ser Asp Thr Ser Glu Arg
220     680               685               690
222 aaa cgg cca gat tca gta tat tcc act tca aag gac aca aag tac cag   2406
223 Lys Arg Pro Asp Ser Val Tyr Ser Thr Ser Lys Asp Thr Lys Tyr Gln
224 695               700               705               710
226 tcg gtg tac gtc ata tca gaa gag aaa gat gag tgc atc ata gca act   2454
227 Ser Val Tyr Val Ile Ser Glu Glu Lys Asp Glu Cys Ile Ile Ala Thr
228            715               720               725
230 gag gtg taaaacagac gtgacgtggc aaagcttatc gataccgtca tcaagctt   2508
231 Glu Val
235 <210> SEQ ID NO: 2
236 <211> LENGTH: 728
237 <212> TYPE: PRT
238 <213> ORGANISM: Gallus gallus
240 <400> SEQUENCE: 2
241 Met Gly Gly Arg Phe Leu Leu Thr Leu Ala Leu Leu Ser Ala Leu Leu
242 1               5               10               15
243 Cys Arg Cys Gln Val Asp Gly Ser Gly Val Phe Glu Leu Lys Leu Gln
244        20               25               30
245 Glu Phe Val Asn Lys Lys Gly Leu Leu Ser Asn Arg Asn Cys Cys Arg
246        35               40               45
247 Gly Gly Gly Pro Gly Gly Ala Gly Gln Gln Gln Cys Asp Cys Lys Thr
248     50               55               60
249 Phe Phe Arg Val Cys Leu Lys His Tyr Gln Ala Ser Val Ser Pro Glu
250 65               70               75               80
251 Pro Pro Cys Thr Tyr Gly Ser Ala Ile Thr Pro Val Leu Gly Ala Asn
252            85               90               95
253 Ser Phe Ser Val Pro Asp Gly Ala Gly Gly Ala Asp Pro Ala Phe Ser
254        100               105               110
```

```
255 Asn Pro Ile Arg Phe Pro Phe Gly Phe Thr Trp Pro Gly Thr Phe Ser
256         115                 120             125
257 Leu Ile Ile Glu Ala Leu His Thr Asp Ser Pro Asp Asp Leu Thr Thr
258         130                 135             140
259 Glu Asn Pro Glu Arg Leu Ile Ser Arg Leu Ala Thr Gln Arg His Leu
260 145             150                 155                 160
261 Ala Val Gly Glu Glu Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr
262             165                 170                 175
263 Asp Leu Lys Tyr Ser Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly
264         180                 185                 190
265 Glu Gly Cys Ser Val Phe Cys Arg Pro Arg Asp Asp Arg Phe Gly His
266         195                 200                 205
267 Phe Thr Cys Gly Glu Arg Gly Glu Lys Val Cys Asn Pro Gly Trp Lys
268         210                 215                 220
269 Gly Gln Tyr Cys Thr Glu Pro Ile Cys Leu Pro Gly Cys Asp Glu Gln
270 225             230                 235                 240
271 His Gly Phe Cys Asp Lys Pro Gly Glu Cys Lys Cys Arg Val Gly Trp
272             245                 250                 255
273 Gln Gly Arg Tyr Cys Asp Glu Cys Ile Arg Tyr Pro Gly Cys Leu His
274             260                 265                 270
275 Gly Thr Cys Gln Gln Pro Trp Gln Cys Asn Cys Gln Glu Gly Trp Gly
276         275                 280                 285
277 Gly Leu Phe Cys Asn Gln Asp Leu Asn Tyr Cys Thr His His Lys Pro
278         290                 295                 300
279 Cys Lys Asn Gly Ala Thr Cys Thr Asn Thr Gly Gln Gly Ser Tyr Thr
280 305             310                 315                 320
281 Cys Ser Cys Arg Pro Gly Tyr Thr Gly Ser Ser Cys 'Glu Ile Glu Ile
282             325                 330                 335
283 Asn Glu Cys Asp Ala Asn Pro Cys Lys Asn Gly Gly Ser Cys Thr Asp
284         340                 345                 350
285 Leu Glu Asn Ser Tyr Ser Cys Thr Cys Pro Pro Gly Phe Tyr Gly Lys
286         355                 360                 365
287 Asn Cys Glu Leu Ser Ala Met Thr Cys Ala Asp Gly Pro Cys Phe Asn
288         370                 375                 380
289 Gly Gly Arg Cys Thr Asp Asn Pro Asp Gly Gly Tyr Ser Cys Arg Cys
290 385             390                 395                 400
291 Pro Leu Gly Tyr Ser Gly Phe Asn Cys Glu Lys Lys Ile Asp Tyr Cys
292             405                 410                 415
293 Ser Ser Ser Pro Cys Ala Asn Gly Ala Gln Cys Val Asp Leu Gly Asn
294             420                 425                 430
295 Ser Tyr Ile Cys Gln Cys Gln Ala Gly Phe Thr Gly Arg His Cys Asp
296         435                 440                 445
297 Asp Asn Val Asp Asp Cys Ala Ser Phe Pro Cys Val Asn Gly Gly Thr
298         450                 455                 460
299 Cys Gln Asp Gly Val Asn Asp Tyr Ser Cys Thr Cys Pro Pro Gly Tyr
300 465             470                 475                 480
301 Asn Gly Lys Asn Cys Ser Thr Pro Val Ser Arg Cys Glu His Asn Pro
302             485                 490                 495
303 Cys His Asn Gly Ala Thr Cys His Glu Arg Ser Asn Arg Tyr Val Cys
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/27/2005
PATENT APPLICATION: US/09/783,931B   TIME: 11:56:31

Input Set : **D:\2nd Substi SEQLIST 7326-122 (as filed).TXT**
Output Set: **N:\CRF4\10272005\I783931B.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:15; Xaa Pos. 4
Seq#:16; Xaa Pos. 11,15,23,24,28
Seq#:17; Xaa Pos. 41
Seq#:18; Xaa Pos. 34,35,39,44,96
Seq#:19; Xaa Pos. 1,19,23,32,33,36,43
Seq#:23; Xaa Pos. 25,34,35,38,97
Seq#:24; N Pos. 854,973,984,1582,1787,1819,1864,1916,1951,2033,2152,2156
Seq#:24; N Pos. 2171,2183,2194,2212,2220,2226,2230,2244,2245,2264,2265,2266
Seq#:24; N Pos. 2287
Seq#:26; N Pos. 559,678,689,1287,1492,1524,1569,1621,1656,1738,1857,1861
Seq#:26; N Pos. 1876,1888,1899,1917,1925,1931,1935,1942,1943,1952,1953,1954
Seq#:26; N Pos. 1968
Seq#:33; Xaa Pos. 25
Seq#:34; Xaa Pos. 27
Seq#:35; Xaa Pos. 166,179
Seq#:36; Xaa Pos. 51
Seq#:37; Xaa Pos. 28,39
Seq#:40; Xaa Pos. 4,43,45,50,54
Seq#:41; Xaa Pos. 5,8
Seq#:42; Xaa Pos. 1,4,5
Seq#:43; Xaa Pos. 226,230
Seq#:45; Xaa Pos. 55
Seq#:46; Xaa Pos. 47,58,73,101,128,167,168,181,187
Seq#:47; Xaa Pos. 2,4,5,7,8,11,16
Seq#:51; Xaa Pos. 126
Seq#:52; Xaa Pos. 30,33
Seq#:60; Xaa Pos. 76
Seq#:61; Xaa Pos. 12
Seq#:62; Xaa Pos. 4,19,36,48,75
Seq#:63; Xaa Pos. 16,17,22,26,30
Seq#:64; Xaa Pos. 2,6,8,10,13,14,19
Seq#:81; N Pos. 6,12,18,21
Seq#:82; N Pos. 3,9,12,15
Seq#:86; N Pos. 3,9,15,18,21
Seq#:87; N Pos. 3,6,18
Seq#:89; N Pos. 3,15,18
Seq#:91; N Pos. 6,9,21
Seq#:93; N Pos. 6

VERIFICATION SUMMARY   DATE: 10/27/2005
PATENT APPLICATION: **US/09/783,931B**   TIME: 11:56:31

Input Set : **D:\2nd Substi SEQLIST 7326-122 (as filed).TXT**
Output Set: **N:\CRF4\10272005\I783931B.raw**

```
L:1139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:1157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
M:341 Repeated in SeqNo=16
L:1183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:32
L:1215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:32
M:341 Repeated in SeqNo=18
L:1249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
M:341 Repeated in SeqNo=19
L:1324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:16
M:341 Repeated in SeqNo=23
L:1376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:840
M:341 Repeated in SeqNo=24
L:1448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:540
M:341 Repeated in SeqNo=26
L:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:16
L:1610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:16
L:1651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:160
M:341 Repeated in SeqNo=35
L:1680 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:48
L:1703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16
M:341 Repeated in SeqNo=37
L:1752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
M:341 Repeated in SeqNo=40
L:1777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:1796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:1843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:224
L:1898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:48
L:1923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:32
M:341 Repeated in SeqNo=46
L:1960 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:2039 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:112
L:2062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:16
M:341 Repeated in SeqNo=52
L:2193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:64
L:2220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:2241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0
M:341 Repeated in SeqNo=62
L:2272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0
M:341 Repeated in SeqNo=63
L:2295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0
M:341 Repeated in SeqNo=64
L:2583 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0
L:2599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0
L:2645 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:0
L:2661 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:0
L:2690 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0
L:2719 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:0
L:2748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:0
```